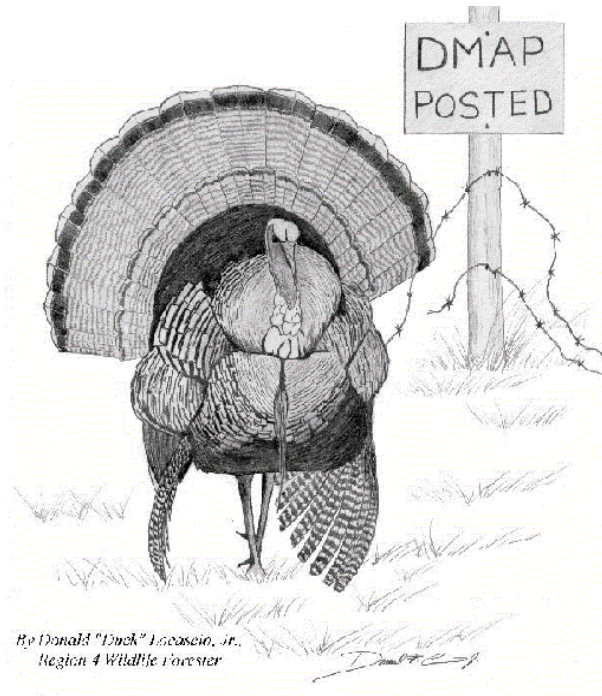


Louisiana Wild Turkey News



Louisiana Department of Wildlife and Fisheries
Spring 2006

Welcome

This inaugural issue of the Louisiana Wild Turkey News is an effort by the Louisiana Department of Wildlife and Fisheries to keep you informed of developments in wild turkey hunting, conservation, and management. Turkey hunters typically have a high level of interest and involvement in wildlife conservation. The restoration of wild turkeys in Louisiana is a success story that all hunters can be proud of. However, the work is not over. To maintain the long-term viability of our wild turkey populations, hunters and the Department of Wildlife and Fisheries will

have to work cooperatively to manage wild turkeys and their habitat. Twice a year we will try to publish this newsletter and present a wide array of information about Louisiana's wild turkey resources. If you have any comments, suggestions for future issues, or even a hunting story you would like to share, please feel free to contact me. I hope you find this newsletter informative and enjoyable.

Larry Savage
Wild Turkey Program Leader
(lsavage@wlf.louisiana.gov)

2006 Turkey Season Forecast

The primary factors influencing turkey hunting success are the number of gobblers and weather. The number of gobblers is dependent on production during the previous 2-3 years. Adult birds, especially 2-year old birds are the most vocal and make up the bulk of the harvest. The onset of gobbling is triggered by increasing day length, but weather can affect the amount of gobbling heard during a given period.

During the 2006 turkey season, the bulk of the birds harvested will have hatched in 2003 and 2004. Production in 2003 was very good to excellent in southwestern, central, and north Louisiana. The south-central and southeast regions experienced

2006 Turkey Hunting Dates

Area A: March 25 – April 23

Area B: March 25 – April 16

Area C: March 25 – April 2

poor production. In 2004, only north Louisiana had good production. Production in the remainder of the state was poor. Production in 2005 was generally good across the state.

Hunters in southeast and south-central Louisiana may find fewer adult gobblers in 2006. Hunters in the central and southwestern regions will have fewer 2 year-old birds, but excellent production in 2003 should mean there are a few 3 year-old gobblers around. Turkey hunters in north Louisiana should find plenty of adult gobblers. Hunters across the state should also see quite a few jakes in 2006.

Some of the impacts of poor production in south and central Louisiana during 2003 or 2004 may be offset by the lower harvest that is thought to have occurred in 2005. The lower harvest probably resulted in higher adult gobbler survival, and thus a few more adult gobblers may be available in 2006.

In sum, if the weather cooperates and gives us a mild spring, turkey hunters in north Louisiana can expect a good to excellent season. In central and southwest Louisiana, hunters should expect a fair to good season. In south-central and southeast Louisiana, a poor to fair season can be expected.

2005 Productivity Survey Results

Beginning in 1994, the first standardized statewide turkey production survey was developed and implemented by Louisiana Department of Wildlife and Fisheries (LDWF). This brood survey is used to estimate poults per hen (PPH). The PPH value serves as an index to annual production. During July and August, LDWF personnel and other selected individuals, record the number of hens, poults, and gobblers observed. The state is divided along parish lines into 5 regions based largely on historic habitat/geological regions.

Production is ranked into 5 categories: 1) excellent-4.0 PPH or higher, 2) very good-3.3 - 3.9 PPH, 3) good- 2.6 - 3.2 PPH , 4) fair - 2.0- 2.5 PPH, or 5) poor- below 2.0 PPH . Wild turkey production in 2005 was fairly consistent across the state's five habitat regions. Regional production ranged from good to very good (see map). PPH ratios were very good in the Atchafalaya/Lower Mississippi Delta and Western Longleaf Pine regions. The remaining three habitat regions had good production. Production in 2005 was above the 11-year average in the Atchafalaya/Lower Mississippi Delta and Southeastern Loblolly Pine, and below average in the remaining three regions. On a statewide basis, 2005 production ranked about average for the 12-year period records have been maintained.

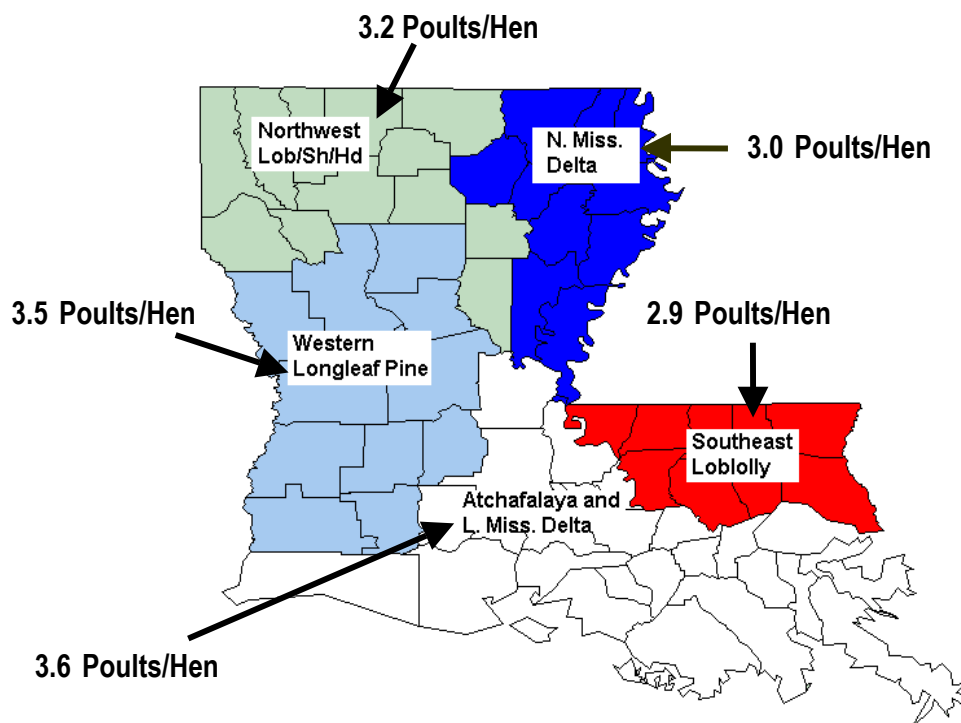


Photo by Alan Boyd – Jackson –Bienville WMA 4/29/05

Wild turkey production in Louisiana is thought to be influenced by weather conditions during two critical phases of the reproductive cycle - nest incubation and brood rearing. Hens incubate eggs from mid-April to early-June. Median hatch date in Louisiana is about May 19th. Below normal spring rainfall produces favorable conditions for successful hatching. Conversely, wet weather during incubation seems to be associated with low productivity. For instance, the lowest poult production in 12 years was recorded in 2004, a spring with exceptionally high rainfall.

Good brood rearing conditions occur when rainfall is normal or above normal during mid-June through August. Moist growing season conditions promote the growth of ground-level vegetation and high insect populations. Lush ground-level vegetation provides escape cover for poults and fosters development of high insect populations. Insects are the primary food of developing poults.

Rainfall during the 2005 incubation period was below normal (61% of normal) across the entire state. This should have contributed to good hatching success. However, below normal rainfall (84% of normal) across the state during the brood rearing period produced less than ideal conditions for poult survival, particularly during the first weeks post-hatch (June).



Impacts of Supplemental Feeding on Wild Turkeys

The practice of supplemental wildlife feeding has increased significantly over the last few years in Louisiana. Corn is the most often used “feed” but the use of pelleted rations is on the increase. Deer and turkeys are most often the “target species” of feeding/baiting. However, feeding stations are used by a wide variety of “non-target” wildlife. Studies with remote cameras have documented heavy nighttime use by some animals. Two Texas studies have shown that over 50% of all supplemental feed is consumed by non-target wildlife. In addition to deer, supplemental feeding attracts squirrels, rabbits, wild turkeys, quail, crows, songbirds, flying squirrels, cotton rats and wood rats.

The pattern of frequent and predictable use of feeders by this group of animals quickly attracts the attention of another group - **predators**. Discovery Channel nature program viewers will recognize this as the “water hole strategy” where lions lounge around a water hole during the dry season waiting for prey animals to come to them. This approach significantly increases their efficiency at catching prey. Predators that frequent corn feeders (and often not seen) include raccoons, coyotes, bobcats, foxes, hawks, owls, and snakes.

Wildlife researchers are starting to investigate the subtle impacts of supplemental feeding on target and non-target wildlife. The following summarizes one recent study that suggests deer feeding programs can increase turkey nest predation. (Cooper, Susan M. and Tim F. Ginnett. 2000, *Potential effects of supplemental feeding of deer on nest predation*--Wildlife Society Bulletin 28(3): 660-666.)



Photo by Ken Cook -- Seven Fat Bienville Parish Raccoons

Texas researchers used artificial nests to measure relative predation rates that ground-nesting birds (quail, turkeys, and songbirds) may be subjected to when deer are provided supplemental feed during spring. In theory, the presence of feeders would produce a combination of enhanced



Photo by Ken Cook – Bienville Parish Bobcat On Bait Pile Patrol

survival and concentration of raccoons and other small carnivores. Using chicken eggs, researchers constructed artificial nests duplicating the nesting behavior of Rio Grande turkeys. Tests were conducted over three years with half of the nests placed in the vicinity of feeders and the other half in similar habitat with no feeders. **Predation rates were 86% at sites with feeders and 58.5% at sites without feeders.** Automatic cameras at nests photographed raccoons and striped skunks eating eggs. The pattern of eggshell breakage indicated that predation was due to raccoons (64.7%), skunks, foxes, or bobcats (11.7%) and unknown

(23.6%). Researchers recommended that: **(1) deer feeders should not be placed in good wild turkey nesting habitat and (2) deer feeders should be left empty in springtime when the turkeys have eggs and small poults, which are susceptible to predation by raccoons.**

This study adds to the growing body of evidence that there may be serious side-effects of supplemental feeding/baiting on both deer and non-target wildlife. Some of these impacts include:

- **Disease** -- Soil contamination around long-established feeding stations could lead to the spread of blackhead disease. This protozoan pathogen is capable of causing

significant turkey mortality. It can be transmitted from turkey to turkey by nematodes and earthworms found in the soil. Avian pox is an important viral disease in turkeys that is transmitted by biting insects. The unnatural concentration of turkeys around a feeding station could facilitate the rapid spread of this disease.

- **Toxins** -- A 1998 LDWF study detected high aflatoxin levels in deer feeders containing corn from agricultural fields. Aflatoxin is a deadly natural toxin. Toxicity depends on the species of wildlife, the age, health, nutritional status of the animal, as well as, the contamination level and amount of corn eaten. Young animals and birds appear to be more susceptible than mature animals and deer. Symptoms include reduced food intake, damage to internal organs (liver), suppressed immune function and weight loss. An estimated 10,000 geese died in Louisiana from aflatoxicosis caused by contaminated field corn during 1998-99.
- **Increases and concentrates predator populations** -- Heavy year-round supplemental feeding may increase the health and population numbers of non-target animals (raccoons), particularly during years of low mast crops.
- **Increases feral hog populations** -- Hogs are direct competitors of deer and turkeys particularly during years of poor mast production.



LDWF RECOMMENDS:

JUST SAY NO TO SUPPLEMENTAL FEEDING/BAITING

IF YOU JUST CAN'T STOP YOURSELF, THEN:

1. If you use corn, use only that which is certified aflatoxin-free.
2. Frequently move feeders to reduce the risk of diseases and parasites.
3. Terminate feeding program by February 15th each year.

Sherburne WMA Research

Sherburne WMA has been the site of ongoing wild turkey research. Wild turkeys were restocked in 1991 after the LDWF purchased the WMA. Wild turkeys have thrived on Sherburne WMA, and since 2000 the turkey kill has averaged about 45 gobblers per year during the 9-day turkey season. Although extensive work has been done to investigate wild turkey ecology in pine/upland hardwood habitats, very little turkey research has been conducted in bottomland hardwood ecosystems. To better understand the dynamics of wild turkey ecology on Sherburne, a research project was developed to investigate hen ecology and productivity. The Department of Wildlife and Fisheries, LSU School of Renewable Natural Resources, and the Louisiana

Chapter of the National Wild Turkey Federation funded the project. LSU graduate student Walker Wilson, working under the direction of Dr. Michael Chamberlain, conducted the research.

Thirty-nine hens were fitted with radio transmitters and monitored during this project. Several interesting aspects of wild turkey ecology on Sherburne have come to light as a result of this work.

- Hen survival throughout the year was higher than that observed from other studies.
- Unlike some other studies, poaching was not a significant hen mortality factor on Sherburne. In fact, none of the radio-marked hens were taken illegally.
- Nest initiation/success was very low.
- Brood survival appears to have been high.

One reason for the observed high hen survival may have been the low nest initiation/success rate. Hens are most vulnerable to predation when they are incubating nests. However, since nest success/initiation rates on Sherburne were very low, hens spent very little time incubating nests. The reasons for low nest incubation /success rates are probably related to the lack of good nesting habitat. Flooding and past timber management practices have resulted in a forest with sparse understory vegetation in many areas. This lack of cover makes nests very vulnerable to predation. During the early spring, much of the forest ground cover is composed of bedstraw and wild carrot. These plants create an illusion of abundant cover, but fade out as spring progresses. Hens that nested in this vegetation had good cover initially, but found their nests exposed as the vegetation disappeared. Despite the poor nest success rates, Sherburne WMA continues to have a healthy turkey population. One explanation is related to the observation that brood survival appears to be high.



LSU graduate student, Walker Wilson, attaches a radio-transmitter.

This research has reinforced the need for active forest management. Good nesting habitat appears to be in short supply on Sherburne. Forest management that enhances the diversity and density of understory vegetation can improve nesting habitat for wild turkeys. While turkeys avoid overly dense vegetation, they do benefit from forest management that results in a diversity of species and structure.

The wild turkey research on Sherburne is continuing with a focus on gobbler survival and dispersal. LSU graduate student Blake Grisham will be wrapping up this phase in 2007. We then hope to begin a new project under Dr. Chamberlain's direction that will investigate raccoon movements and behavior and how they are related to landscape features such as food plots, rights-of-way, and forest structure characteristics. Since raccoons are thought to be one of the

major turkey nest predators, this information will give us a better idea of how we can manage habitat to reduce wild turkey nest predation.

Wild Turkey Banding

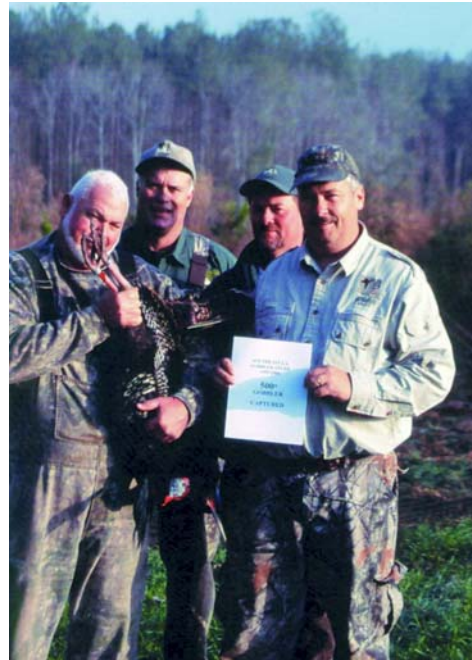
Most hunters are familiar with duck banding, but may not realize wild turkeys are banded as well. The Louisiana Department of Wildlife and Fisheries has been banding wild turkeys for many years, but has increased its banding efforts in recent years. As the wild turkey restoration program winds down, attention is focused on habitat improvement and harvest management. A key component of managing the harvest is knowing what percentage of gobblers is taken by hunters each year. Banding is an efficient and effective means to derive harvest rate estimates.

During 2006, turkey hunters may encounter banded gobblers in northwest and north-central Louisiana, on or near Tensas NWR, Big Lake WMA, Red River WMA, Three Rivers WMA, Sherburne WMA, Bens Creek WMA, and throughout Washington Parish. Hunters lucky enough to kill a banded gobbler are asked to report the band by calling the phone number printed on the band or 225/765-2350.

New State Record Turkey

On April 2, 2005, Ethan Culver rewrote the Louisiana turkey book by harvesting a Bienville Parish gobbler that scored 54.5, a new state record.

The LDWF's Region 7 Wildlife Division staff has been engaged in one of the most comprehensive wild turkey banding projects ever conducted. This group recently commemorated the banding of the 500th gobbler.



(L to R) Bruce Knight, Tommy Bruhl, Calvin Waskom, and Jimmy Stafford display the 500th gobbler.

Top Five Louisiana Gobblers

SCORE	HUNTER	PARISH	YEAR
54.5	Ethan Culvar	Bienville	2005
54.3	Terrell Gaines	E. Feliciana	2002
53.0	Duane Watson	Vernon	2002
52.6	Karl Casanova	Washington	2002
52.0	Charles Caraway	Vernon	1982
65.8**	Jason Litoma	West Feliciana	2004

** New Non-typical Category.

Jason Litoma also made history by being the first hunter to submit a gobbler that qualified for the non-typical category. Jason's 2004 West Feliciana bird sported double spurs that scored a whopping 65.8 (photo).

Spur length is one of the most reliable indicators of gobbler age, although its reliability declines beyond 2 years of age. Louisiana's state turkey records are based on a score developed by averaging the length and base width of spurs in millimeters. To have a gobbler scored contact your local regional LDWF Wildlife Division office (phone numbers are available on the back page of the turkey hunting pamphlet).



Jason Litoma's double spur gobbler.

Double spur gobblers are very rare. An informal inquiry of turkey biologists throughout the nation indicated that most had not seen a gobbler with multiple spurs. Of those that had seen one, only 1 or 2 double spur birds were encountered during the course of their career. Much more common are gobblers with multiple beards. In the Washington Parish gobbler banding project, 5.2% of the gobblers had multiple beards.

Four of the top five record book gobblers have been killed since 2002. This "rash" of big toms can be attributed to several factors: more hunters are aware of the record book program, new areas have been opened to hunting, and LDWF regulation

changes (season timing/length and the 2-bird bag limit) to increase adult gobbler numbers and gobbling activity.

Anadarka Petroleum Corp. Donates ATVs for Turkey Research

Anadarka Petroleum Cooperation is developing a large natural gas field in the piney-woods of Jackson Parish that contains 280+ well locations connected by 200+ miles of pipeline rights-of-



Lane Johnson, Anadarka pipeline foreman, delivers ATVs.

ways. This activity has created abundant edge and open areas that provide seasonal habitat for some species of wildlife, particularly wild turkeys. Anadarka is an environmentally conscientious company that takes the impacts of its activities on wildlife habitat and wildlife related recreation seriously. Recently, Anadarka donated two used ATVs for use by LSU students conducting turkey research on Sherburne Wildlife Management Area. Anadarka has also donated \$5,000 to the Habitat and Safety project on Jackson-Bienville Wildlife Management Area.

LDWF Employees Receive NWTF Awards

Two LDWF employees were presented with awards at the National Wild Turkey Federation State Awards Banquet held February 25th in Marksville. Lynn Bennett, Fort Polk WMA Wildlife Technician was presented the Technician of the Year Award. Senior Agent Scott

Fontenot, assigned to Evangeline Parish, was the recipient of the Wildlife Agent of the Year Award.



Lynn Bennett (center) shown with LDWF Secretary Dwight Landreneau (l) and LA State NWTF Chapter President Mike Rainwater (r).



Senior Agent Scott Fontenot shown with his wife Tina, LDWF Secretary Dwight Landreneau (l), and LA State NWTF Chapter President Mike Rainwater (r).

NWTF Hunting Heritage Super Fund Program Supports LA Turkey Management

The National Wild Turkey Federation (NWTF) has been a key partner in the restoration and management of wild turkeys in Louisiana for many years. This high level of support continued in 2005. The LA State Chapter, through the NWTF Hunting Heritage Super Fund Program, contributed nearly \$50,000 in 2005 for wild turkey research, management, and law enforcement work to the LDWF, U.S. Forest Service (Kisatchie National Forest), and U.S. Army Corps of Engineers (Indian Bayou). In addition, a similar amount was allocated for several programs (Jakes, Women in the Outdoors, Archery in the Schools, Hunting Heritage Fund, etc.) that enhance conservation education and protect hunting rights.

Turkey Tales

By Matt Reed, East Feliciana Parish

Being a first year turkey hunter, I was not sure what to expect last week when my friend, Marshall Varnado, and I decided to try our luck around Churchill, MS. It had been raining all morning, but it finally let up enough for us to head out to the woods around 7:30. We set up in some brush on the edge of an old food plot, and Marshall, being the more experienced hunter, began calling. As soon as he started, we heard some movement in the bottom to my right. A few minutes later, during the next sequence of calling, I heard it again- this time getting much closer. I turned to my right just in time to see a full-grown coyote come through the brush and jump on my buddy, its paws hitting him in the chest. After a few swift kicks and choice words from the taken aback hunter, the coyote, who was just as surprised as his victim, realized that this was a case of mistaken identity and decided to fall back to the safety of the woods. Needless to

say, we were both a little speechless after this took place. We didn't kill or even hear anything that morning, but I think we got a better story out of our hunt than most people who did manage to get a turkey.

If you have a turkey tale you would like to share, send it to Larry Savage (lsavage@wlf.louisiana.gov) or 318/237-9858.

West Bay WMA Trophies



Wyatt Stein, Quinton Trammel, and Alex Marcantel display gobblers they took on the 2006 West Bay WMA youth hunt. Quinton's bird had 1¼ inch spurs.